CORMORANT RECOMMENDATIONS

Wednesday, May 11, 2005

By: Larry Meier

1. The Michigan DNR adopt an official position statement on cormorants as the Arkansas Game Commission did.

2. A mandated working relationship between the Michigan DNR Fisheries and Wildlife is critical.

STARTed 3. Form a working consortium to include the U.S.D.A. Wildlife Services, Michigan DNR Fisheries and Wildlife Division, Indian Commission, MUCC, Steelheaders Association, Great Lakes Charter Boat Association, Michigan Chamber of Commerce, Ontario Ministry of Natural Resources.

4. Have all creel study personnel record sightings, numbers, and location of cormorants to the Michigan USDA Wildlife Services. some

5. Wildlife Services become involved with sportsmen clubs to establish a working relationship for the taking of cormorants per a master plan for the state in 2006. U.S.D.A W.S only

6. DNR officers to assist the Michigan USDA Wildlife Services in monitoring stations in collection of data.

7. The Michigan DNR Fisheries Department to continue follow-up fish studies in cormorant areas.

8. No fish to be planted without a protection plan for the young fry from cormorants. (Not just for one day).

9. Do selective stomach content studies with MSU from cormorants taken by the DNR.

10. Implement a college student base to help USDA Wildlife Services oil eggs.

11. Reduce cormorants in Michigan by 90% over a three-year period.
STARTed 10-50 %

12, **The Michigan DNR should become involved with other state DNR officials to coordinate a regional plan in the 18 mid-west states that are affected by cormorant destruction. The Ontario Ministry of Natural Resources should also be included.** START 07 by Rep BART STUPAK

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U.S. Representative Dave Camp MI
U.S> Representative Marcy Kaptur - Ohio
U.S. Senator, Debbie Stabenow - MI

FLYING PIRANHAS TAKE OVER THE OLD FISHING HOLE

By: Larry Meier

May 2, 2007

The cormorant is a greenish-black bird with orange facial skin and a hooked beak. An adult bird weighs about four pounds and eats from 1.25 to 1.5 pounds of **live** fish per day, per bird. Cormorants, like other birds, are counted in terms of nests only. Therefore, when a study says there are 4,000 nests, that equates to 8,000 adults plus an additional 14,000 new birds from that roost annually, because cormorants average 3.5 young per nest. The count further does not show the young adults from the previous three to four years, and seeing that cormorants have a reproductive success rate of close to 90%, this then would equate to a 29% increase every year in the cormorant population in areas where they are reproducing. Nationally, cormorants are increasing 6% with now well over 3,000,000 birds preying on our fish population. To bring this into perspective, in Michigan, in 1981, there were 8 pairs reported and by 2007, the State of Michigan itself is well in excess of 500,000 flying piranhas. USDA Director, Pete Butchko, has indicated that cormorants have increased over a thousand- fold, that's 100,000% increase in the last 30 years.

Research in Michigan is showing that cormorants will fly up to 25 miles in any direction from their roost daily and are eating fish which includes pike, salmon, trout, perch, up to 17 inches in length. Cormorants have been caught in Indian nests up to 150 feet and yet they have also been observed eating fish in four inches of water. They are a extremely intelligent bird and can feed in flocks of well over 1,000 birds in a raft fashion, whereby, the front birds go down and push the fish up from the bottom, then the entire

flock gouaches themselves in a piranhas fashion. The author has seen the clear waters of Lake Huron, Michigan, turn red and the water boil, when a flock of cormorants are on the feed. Jim Johnson, a Michigan DNR Research Biologist, has indicated that Lake Huron once produced about 10-15 pounds of fish per acre, but that figure has dropped to about a half a pound because of the cormorant predation. He further indicated that species such as white fish, yellow perch, and small mouth bass that were abundant 10 years ago, have virtually disappeared. In every town where cormorants are present, within two years the trees are dead from the acidity action of the cormorant guano. The acidic reaction is so bad that it is currently eating into the paint on the Mackinac Bridge and is causing all types of damage to the lighthouses across Northern Michigan. Further, as a large population takes over a island or other roosting area in large numbers, the stink is unbelievable from their excrement. Another area of great concern is that the cormorants take over the nesting areas of other birds, thereby reducing their populations significantly.

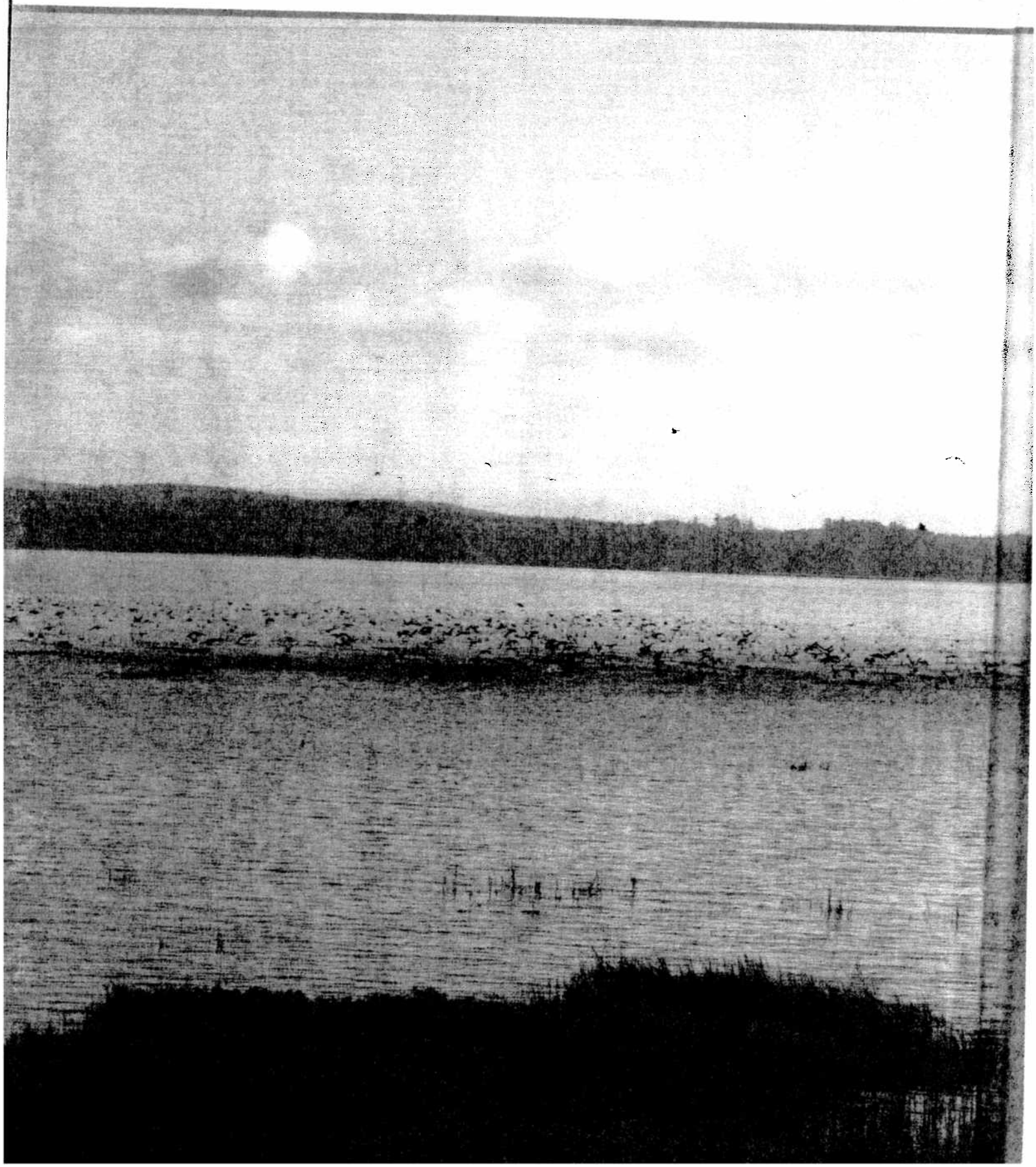
Currently, 13 states have been granted a depredation order that allows the USDA Wildlife Services, the States DNR, and the Indian tribes on their own land to reduce cormorant populations. The populations of cormorants will only be reduced if egg oiling and lethal control are done together. Individuals can harass cormorants, but we have found that if you do this during the day, they will only vomit up what they have already eaten and they will eat again before night fall. Therefore, if you want to harass cormorants, do it the very first thing in the morning. Another fallacy is putting animals, such as raccoons, into their nesting areas to decrease the population. The net result of this action is that the birds will just move to another area and destroy the trees in the new roost.

We started this program in Michigan with three concerned fishermen and our numbers have now grown to over 17,000 fed up people. We have been able, through our U.S. Senators to get over

$200,000.00 in dedicated monies for cormorant control and this past year the State of Michigan has added $150,000.00. Locally, individuals and communities have added another $50,000.00 to bring back the "old fishing hole". Under the authority of the USDA Wildlife Services, a few sportsmen clubs have been trained and deputized to assist in cormorant control in specific areas. Their harassment program has been a great success in bringing back fish populations that were almost driven to extinction. After three years of control in the Eastern U.P. of Michigan, the DNR is showing a 40% increase in our perch population. This model is being presented after a 20 year study by the Fisheries Division of Michigan showing as the cormorant population increased, the fish disappeared conjunctively and the fish are now on the upswing.

In conclusion, you will only get your fishing hole back for your family's enjoyment, if you get actively involved in a state-wide program to legally reduce cormorants in your area.

Cormorants Feast on



Endangered Salmon

"Since 2003, quite a few states have destroyed large numbers of cormorants. Minnesota has exterminated 3000 birds; Michigan and Texas have each killed 2600; and New York has eliminated 1600."

The Columbia River estuary is home to the largest breeding colony of double-crested cormorants in North America. Some 25,000 of the birds feast on a rich cornucopia of aquatic life, including 13 endangered species of salmon and steelhead. Although these endangered species comprise only about 5% of the cormorant's diet, the birds still consume almost 6.5 million juvenile salmon each year.

There are almost two million cormorants in the U.S. The bird is protected under the Migratory Bird Treaty Act of 1918. But the Act also grants the Secretary of Interior broad authority to allow the killing of bird species protected under the Act. A few years ago, thousands of double-crested cormorants descended like a Biblical plague of locusts on catfish farms and trophy bass lakes all across the Midwestern and Southern United States. Desperate fish farmers and bass anglers petitioned the U.S. Fish and Wildlife Service (USFWS) for relief.

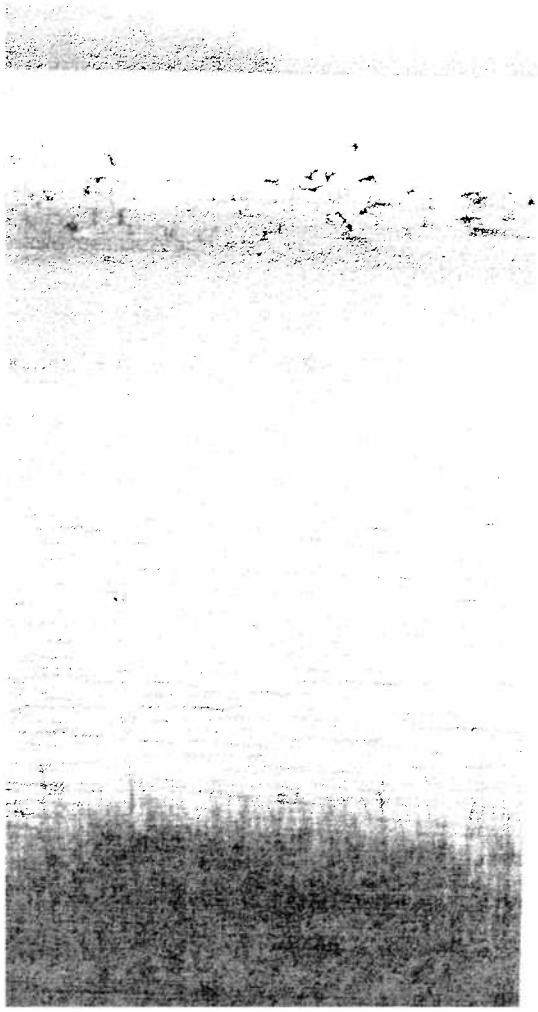
In 1998, the USFWS authorized 13 states to kill cormorants that posed an extreme threat to catfish farms. In 2003, the USFWS allowed 24 states to issue their own regulations governing the killing of cormorants that damaged aquaculture facilities, recreational fisheries, vegetation, and the habitat of other bird species. The states affected by this rule are all located in the East, Midwest, Northeast and South.

Since 2003, quite a few states have destroyed large numbers of cormorants. Minnesota has exterminated 3000 birds; Michigan and Texas have each killed 2600; and New York has eliminated 1600. Cormorant extermination is also planned in Alabama, Arkansas and Vermont.

Under the Migratory Bird Treaty Act and the National Environmental Policy Act (NEPA), Interior Secretary and former Idaho Governor and Senator Dirk Kempthorne could do for the Pacific Northwest what his predecessor, Gale Norton, did in 2003. He could issue regulations to allow the killing of double-crested cormorants in the Columbia River estuary, in order to protect the endangered juvenile salmon that are trying to make their way to the sea.

Unfortunately, the USFWS is not favorably disposed toward any actions that would involve disturbing or moving the estuary cormorants, let alone killing them. "Further research is required...," said Tara Zimmerman of the USFWS, "to determine... juvenile salmonid consumption, and to better assess any impacts of cormorant predation on specific stocks of endangered and threatened salmonids." However, U.S. Army Corps of Engineers (USACOE) representative Wes Anderson told a Congressional meeting in Pendleton, Oregon, in February 2006, that the Columbia River estuary cormorants consumed an estimated 6.4 million juvenile salmon in 2005.

The defenders of the double-crested cormorant contend that the USACOE is to blame for the concentration of cormorant nests in the Columbia River estuary. The cormorants



Thousands – that's right, thousands – of cormorants, ospreys, terns, gulls and other aquatic birds roost together on dolomite islands in Willapa Bay, Washington. This photo only shows about one-quarter of the birds actively feeding in this area.

Cormorants are plentiful and prolific in the lower Columbia River watershed. Sentinels stand guard at seemingly every corner of the lower river.

backers argue that, with its constant dredging of the Columbia River ship channel, the USACOE creates numerous sand islands that are ideal nesting locations for cormorants.

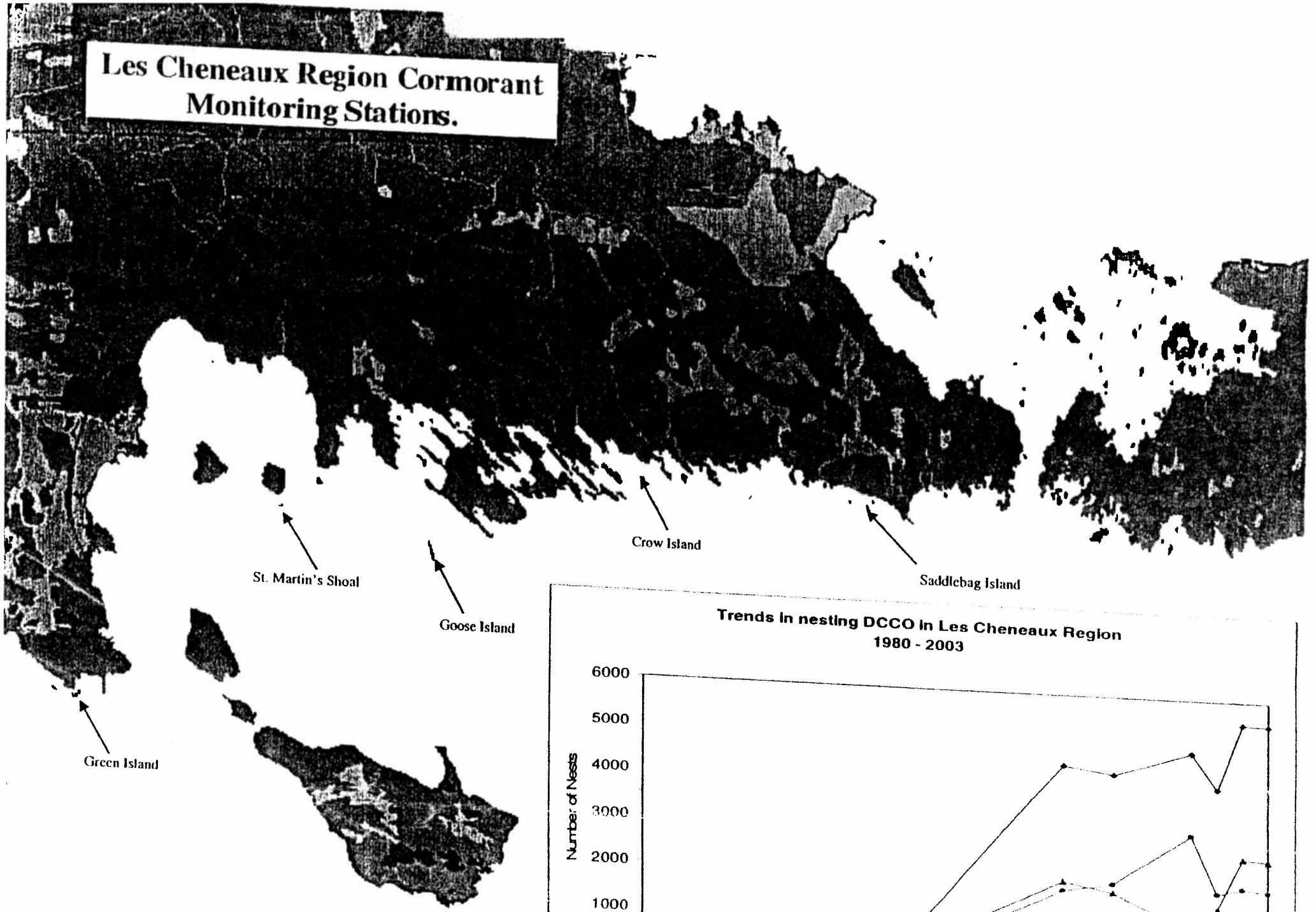
Unfortunately, cormorants are highly adaptable. While sand islands may be particularly comfortable nesting locations for cormorants, the birds can easily make do with far worse accommodations. Virtually any non-submerged surface will suffice in a pinch as a cormorant nesting site. Attempting to deny cormorants their potential nesting locations and materials is very labor-intensive and ultimately futile. The wildlife experts who manage cormorants in the 24 states covered by the 2003 Final Rule concentrate instead on killing adult birds and destroying nests to control their populations.

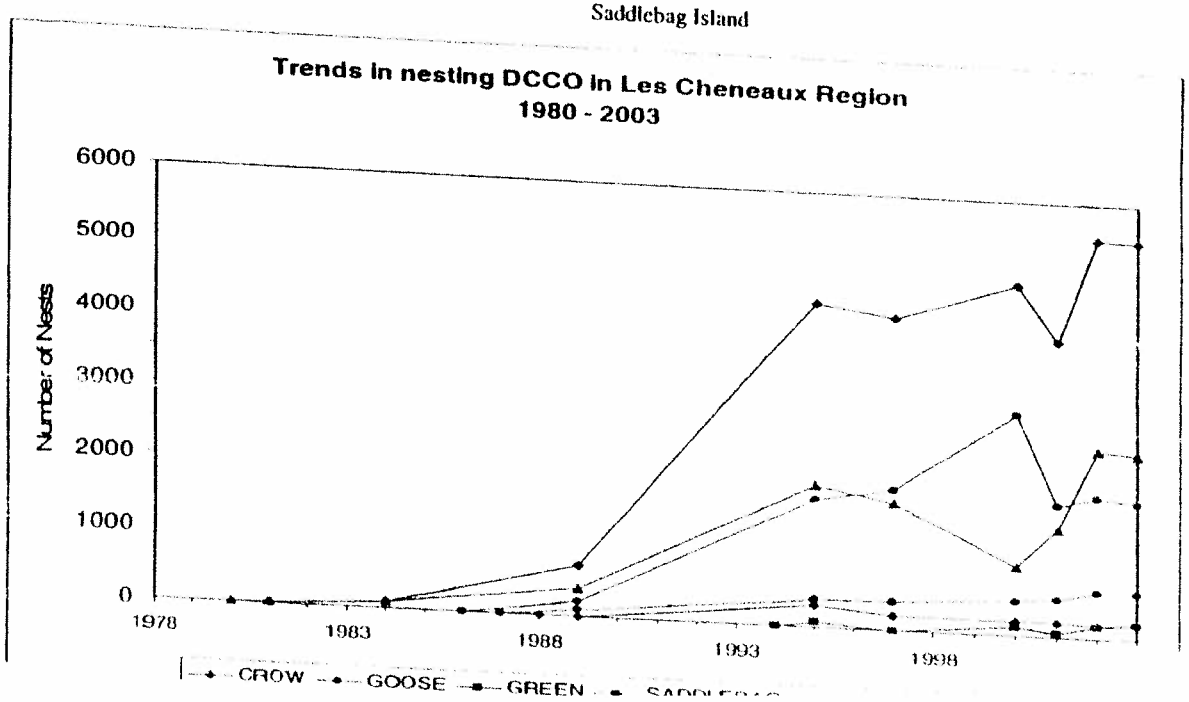
The Federal government would like to use the National Environmental Policy Act (NEPA) process to review the problem of cormorant predation on juvenile salmon in the Columbia River estuary. The National Marine Fisheries Service (NMFS) is the Lead Federal Agency (LFO) for salmon recovery. They have attempted for ten years to gain Federal court approval for a Biological Opinion, which would be the first step in a cormorant-related NEPA process. The draft Biological Opinion reportedly recommends conducting more research, which would prove that cormorants are impeding the recovery of endangered salmon species. The NMFS did not respond to a query about the Biological Opinion.

Because of its unique engineering expertise and state-of-the-art equipment, the U.S. Army Corps of Engineers (USACOE) is the action agency for the cormorant-related NEPA process. They also build and operate any physical structures and equipment associated with salmon recovery. The USACOE would be called upon to develop technical options for reducing cormorant predation on juvenile salmon. The agency did not respond to a query about its role in a cormorant-related Environmental Impact Study (EIS).

In order to develop such options, some cormorants would have to be killed. USFWS permits would be required in order to kill the birds. "The USACOE have not initiated cormorant management or asked us for a permit to kill cormorants," said USFWS spokesman Nicholas Throckmorton, "and they know they have to comply with NEPA before any cormorant predation control action is implemented."

Les Cheneaux Region Cormorant Monitoring Stations.





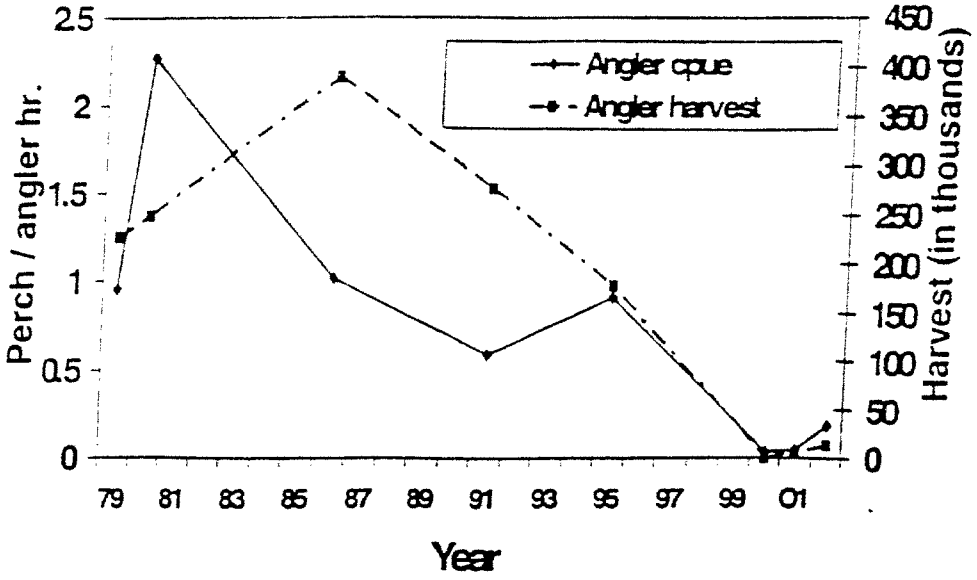


Figure 1. Trends in the sport harvest and angler catch-per-unit-effort (perch/angler hr.) of yellow perch from the open water fishery in the Les Cheneaux Islands, Lake Huron 1979 – 2002. Despite the collapse in the fishery in 2000, total annual mortality rate of yellow perch has remained very high.

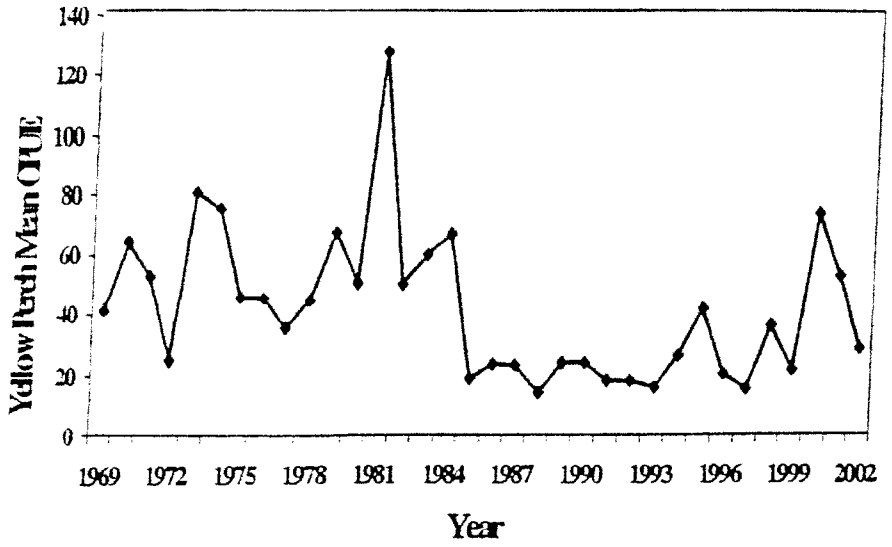


Figure 2. Trends in abundance of the yellow perch population as determined by annual survey netting performed by the Michigan DNR 1969 – 2002, as indicated by survey net catch-per-unit-effort (CPUE). In recent years, the CPUE has been principally sustained by a single netting location while the catch in other locations has declined. Much of the catch is also juvenile fish not available to anglers because of the minimum length limit.

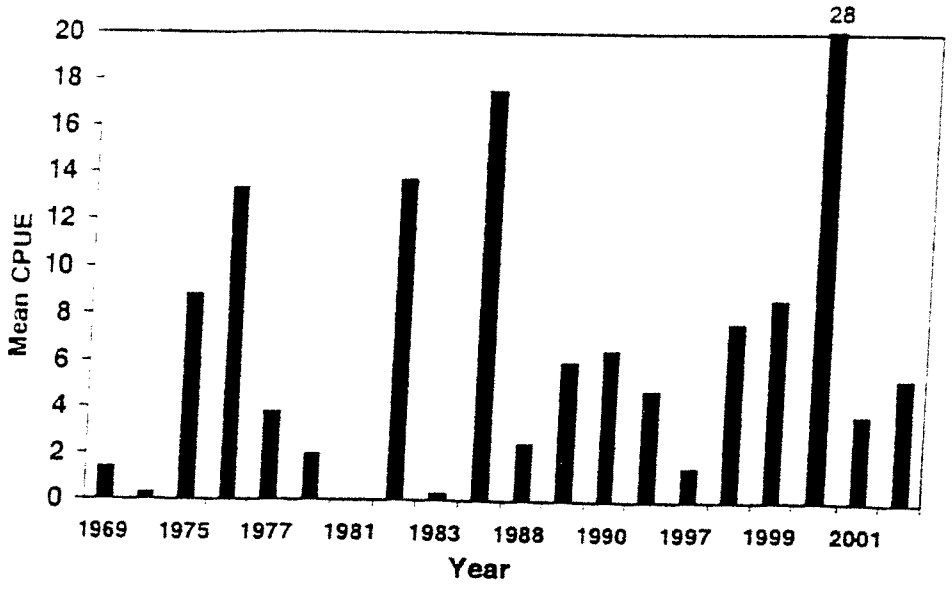


Figure 3. Trends in yellow perch recruitment in the Les Cheneaux Islands based on mean CPUE of age-2 fish for 20 years between 1969 and 2002. This indicates that while variable, recruitment has been continuing in the years leading up to, during the collapse.

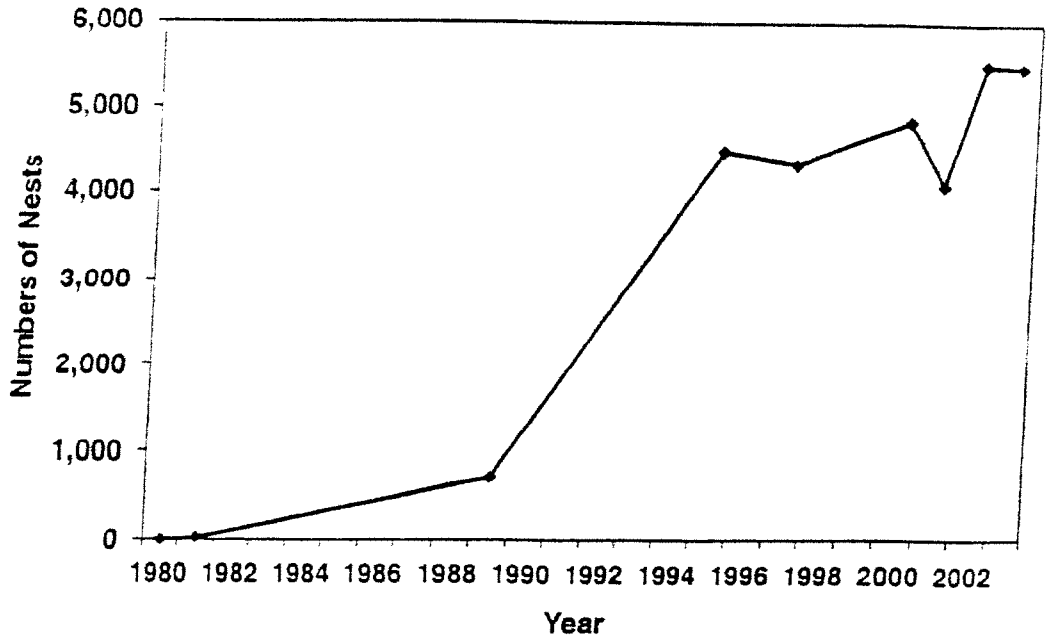


Figure 4. Numbers of cormorant nests in the Les Cheneaux Islands vicinity 1980 to 2003. The increase in number corresponds closely with the collapse of the fishery.

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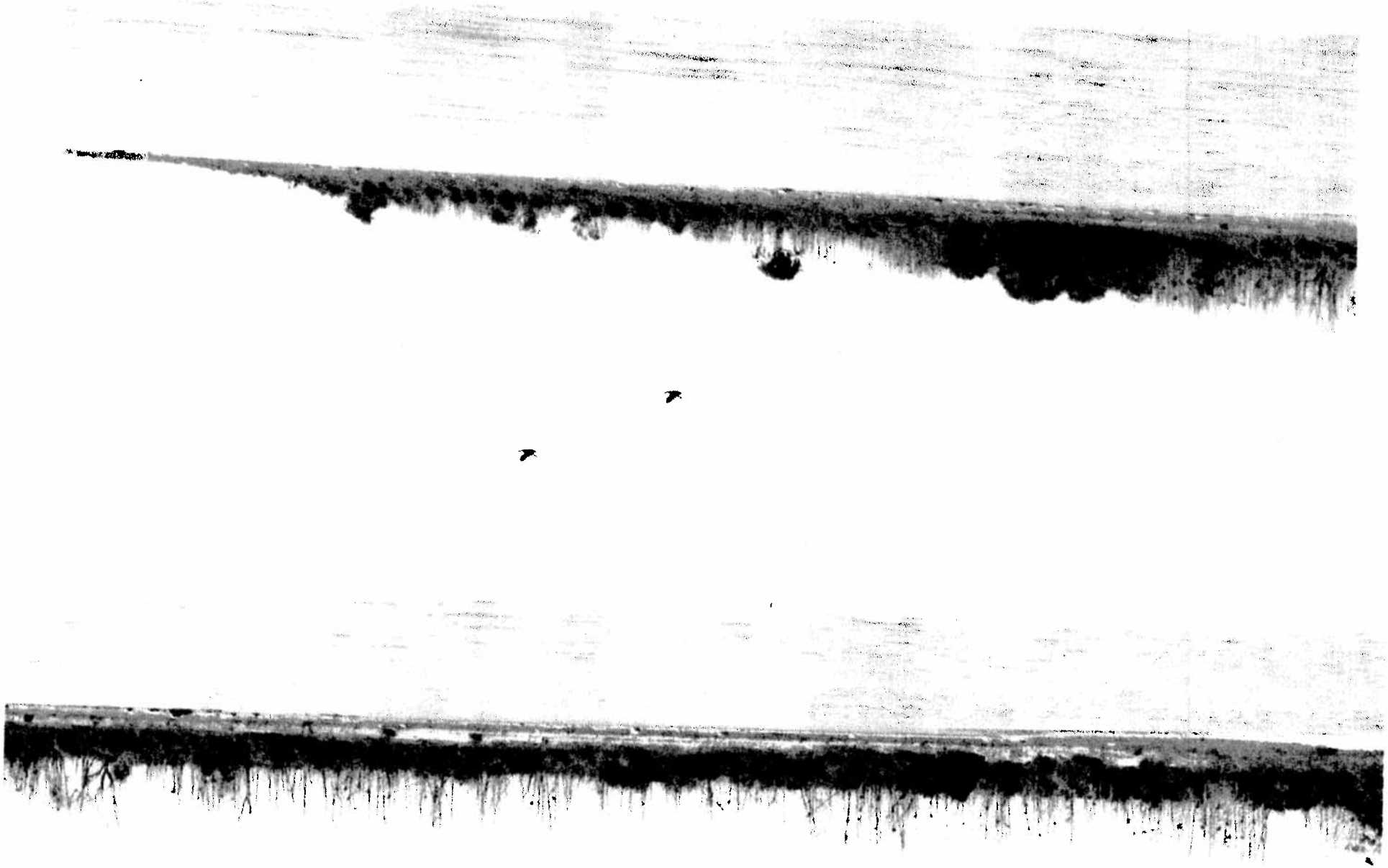
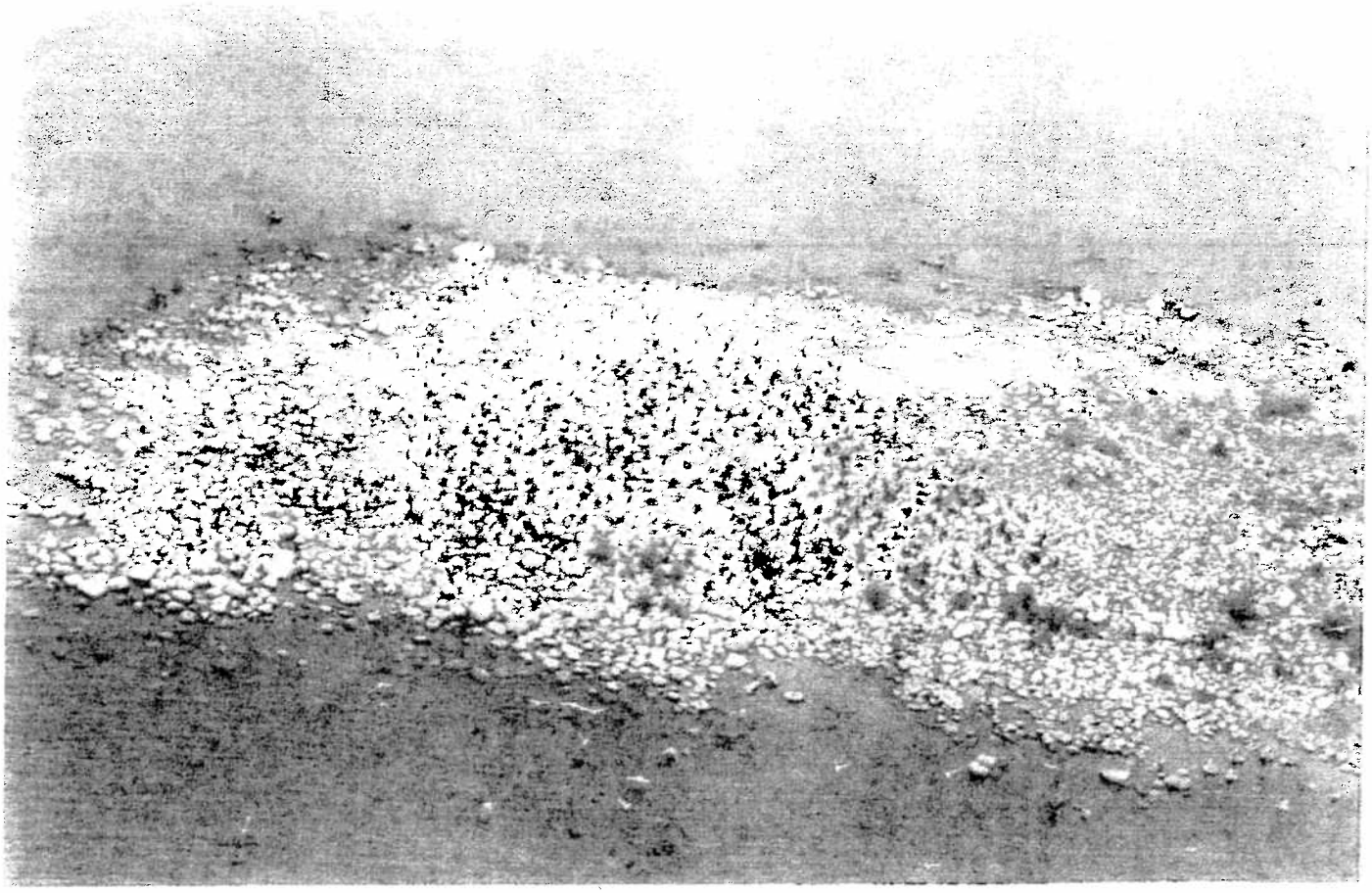
Northern Lake Michigan Creel Survey Estimates

Estimated Number Harvested and Estimated Angler Hours for northern ports of Lake Michigan monitored during 2005 Season (sport fishing/non- charter).

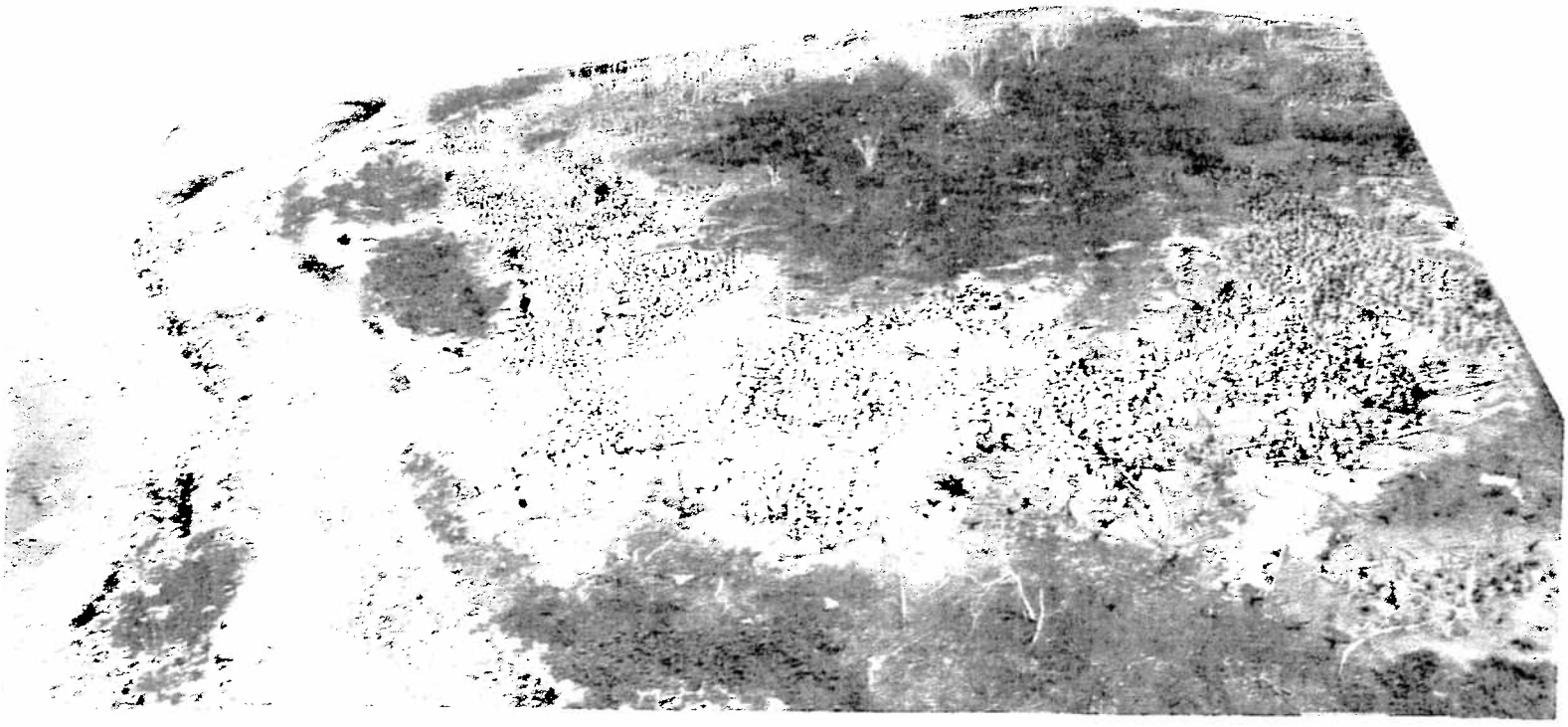
* Note- Two standard errors of the mean are not indicated. Ports are not monitored every month of the year.

Species/Ports	Harbor Springs	Bear River	Petoskey	Charlevoix	Frankfort	Onekama	Manistee	Ludington
Bluegill						223	14	
Brown trout		29		10	1,362	32	2,122	1,273
Channel catfish			9	5,169				
King salmon	1,873	1,267	3,733		24,704	3,724	34,437	35,692
Coho salmon					1,184	342	484	661
White sucker								
Drum				20	7		68	54
Lake trout	247		574	433	658	107	1,226	928
Lake herring								
Lake whitefish					7			
Northern pike					64	3	39	24
Other					650			
Rainbow trout		262	155	83	1,449	31	1,809	1,828
Rock bass			4			126	595	
Round whitefish			56	22	73		1,700	
Smallmouth bass	58		2	186	56	51	58	
Walleye			42	6	13		55	
Yellow perch	174		69	35			8,976	
Angler Hours	10,726	8,510	28,520	44,908	167,397	37,978	270,527	220,804





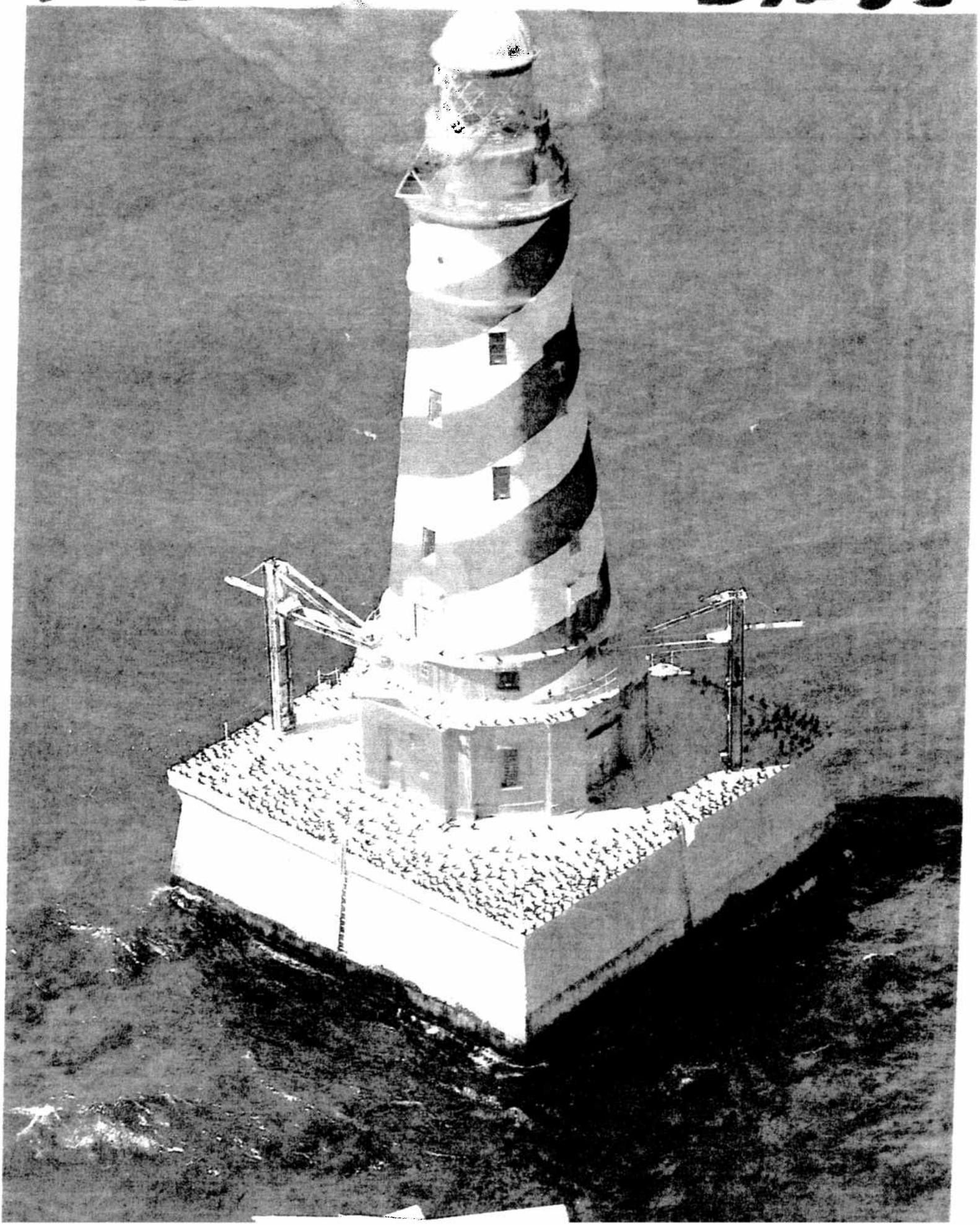
Double-crested cormorants nesting on Pismire Island, Michigan. Last year about 1000 nesting pairs were discovered on this island which is located within a once famous smallmouth bass fishery. (picture dated - June 2006)



Double-crested cormorants nesting on Hat Island, Michigan. Over 5200 nests were found last year. (picture dated - June 2006)

1200

BIRDS



January 08, 2007 To: Mich House of Rep.

Cormorant Update: The Good, the Bad, and the Ugly

Good:

Ontario, Canada August, 2006

Ontario finally is confirming what we have been trying to say for a number of years. "A scientific study to be published shortly will confirm what has been suspected for years: Cormorants are depleting fish populations dramatically in Ontario. Cormorants are wiping out large numbers of small mouth bass, yellow perch, alewife's, trout, salmon and other large lake fish". Six nesting pairs in 1990 on Toronto's Leslie Spit Lake have grown to 6,125 pairs and when the non-breeders have been added, this equals 25,000 cormorants.

Cedarville-Hessel – Third Year

The USDAWS killed 47.7% of adult cormorants which equaled 1,900 birds. They oiled over 5,000 eggs and only 100 chicks survived. The Michigan DNR Fisheries is recording that 40% of the perch population has survived and this is in all measured classes. This past winter on Government Bay, forty ice fishing shanties were seen and many people were catching perch; three years ago there was only one part-time shanty.. The pike have returned, although many are below legal limit, but they are being caught all over the area.

Drummomd Island – Second Year

The local Sportsmans Club, under the authority of the USDA, killed 152 cormorants and harassed over 3,000 birds in a 30-day period. Three years ago, in the same period of time, they harassed over 18,000 birds. It was reported from the local fishermen, that they have had the best ice fishing in 12 years for perch.

Manistique Lake – First Year

On the Big Lake, 50 Cormorants were killed. On the South Lake, 39 were killed and on both lakes a harassment program was put in place.

Indian Lake – First Year

Seventy-six cormorants were killed and 2 to 3 thousand birds per day were harassed. The numbers would have been higher but the weather was a major problem with big waves.

Brevort Lake – Second Year

The local sportsmans club, under the USDAWS killed 271 cormorants and harassed over 6500 birds. This is down from 30,000 three years ago. A new walleye protection program was started over the spawning area in the middle of the lake. Local fishermen are again catching perch.

Ludington – First Year

The USDAWS along with Tom Rozich, from the Michigan DNR Fisheries, did a nest count on the consumers break wall. They found 482 nests which equates with the new young to close to 5,000 cormorants. The DNR Creel Study showed zero perch in the area. Hopefully, this will be one of the new sites for cormorant control in 07.

Beaver Island – First Year

An aerial count of 11,300 nests were taken including 5100 nests on Hat Island alone. Hat Island is one of the eight U.S. Fish and Wildlife Services protected National Wildlife Refuges. We sure hope that an oiling and adult reduction program can be instituted in 07.

South Manitou Island – First Year

USDAWS killed (111) 25% of the adult birds in tree nests because of the concern for the destruction of the vegetation on the island.

Green Isle – First Year

This island by the Big Mac, because of a request from the landowner, had a 50% reduction in the cormorants to help reduce the destruction to vegetation.

Alpena – First Year

The USDAWS killed 1,928 cormorants which is a 30% reduction in the area.

Long and Grand Lake – Second Year

The USDAWS along with the local sportsmans club killed 25 cormorants and disbursed the remainder of the birds all summer.

Oscoda Vanetten Lake – First Year

A disbursal program only was instituted.

Rockport – Second Year

A combined program with the Alpena Michigan DNR Fishers USDAWS, and the local sportsman killed 63 cormorants and disbursed all the other birds over the planting area that had been moved from Alpena by the Michigan DNR. Finally, our tax dollars are being used to stock fish rather than to feed cormorants.

Escanaba – First Year

USDAWS killed 966 birds and oiled 60% of the eggs on Snake Island and 80% on Fishermans Island. This equated to 17,000 eggs oiled. However, 4,000 birds hatched because of the early spring.

Alpena, Brevort, Cedarville and Drummond Island – First Year

Lake Superior State College, through the .leadership of Jim Johnson (Alpena ,Michigan DNR Fisheries), has agreed to do stomach research on cormorants. The USDAWS is paying for this project.

The State of Michigan with the leadership of Senator Michelle McManus, and the Michigan House Committees led by Representative Walker and Caperson have been instrumental in securing $150,000.00 directly to Pete Butchko for the 2007 campaign. We were also able under a contract with the Michigan US Wildlife Services to receive funding from the Ludington Charter Boat Captains Association in the amount of $3500.00. The Flint Steelheaders including other chapters in the amount of $2200.00 and the Detroit Steelheaders in the amount of $1,000.00 and private donations from Cedarville in the amount of $500.00. It should further be noted that the four Sportsmans clubs spent in excess of $10,000.00 of local monies in their area on cormorant control.

At this point, we have been informed that the Federal Government will be authorizing between $300.000.00 and $350,000.00 for the 2007 campaign. This is being spearheaded by U.S. Representatives Bart Stupak (D) and Dave Camp (R) in the House of Representatives and U.S. Senator Debbie Stabenow (D).

Hopefully, the USDAWS will be able to assist the Lighthouse Keepers Association in 2007 to clear the cormorants and reduce their damage to the lighthouses.

The Bad:

Escanaba – First Year

The original plan was to reduce the adult cormorants by 30% and this number was reduced to 10% by the US Fish and Wildlife Service. Further, Gull and Little Gull Islands south the Garden Peninsula were not accessible, because the Michigan Nature Association will not allow any activity on their islands.

Alpena – First Year

Even with the written request from Senator Stabenaw, the US Fish and Wildlife Service refused the USDAWS to even oil eggs on Scarecrow Island. Two other islands were also refused access by Michigan Nature Association.

The Ugly

The US Fish and Wildlife Service is refusing any control on their Natural Wildlife Refuges. This will be extremely difficult for towns like Alpena with Scarecrow Island, Beaver Island with Hat Island, and Saginaw Bay with both of the Charity Islands to effectively bring the explosion of cormorants to a reasonable number.

The Audubon Society and four other like agencies are again suing in Federal court to stop all cormorant reduction and control.

The Mackinac Bridge is now expressing concerns of what cormorant nest weight and feeces are going to do to the bridge because of the weight and acidic actions.

It has been rumored that the Audubon Society in Mississippi and Arkansas is trying to lease land from cotton farmers that have lakes for cormorant refuges.

Action Needed:

We need the assistance of your organization to write a letter to Dale Hall from the US Fish and Wildlife Service and express your extreme displeasure of his agency refusing access to the National Wildlife Refuges on the aforementioned islands. I would further suggest that you send copes to Senator Debbie Stabenaw and Senator Thad Cochran and Michigan Senator Michelle McManus ASAP.

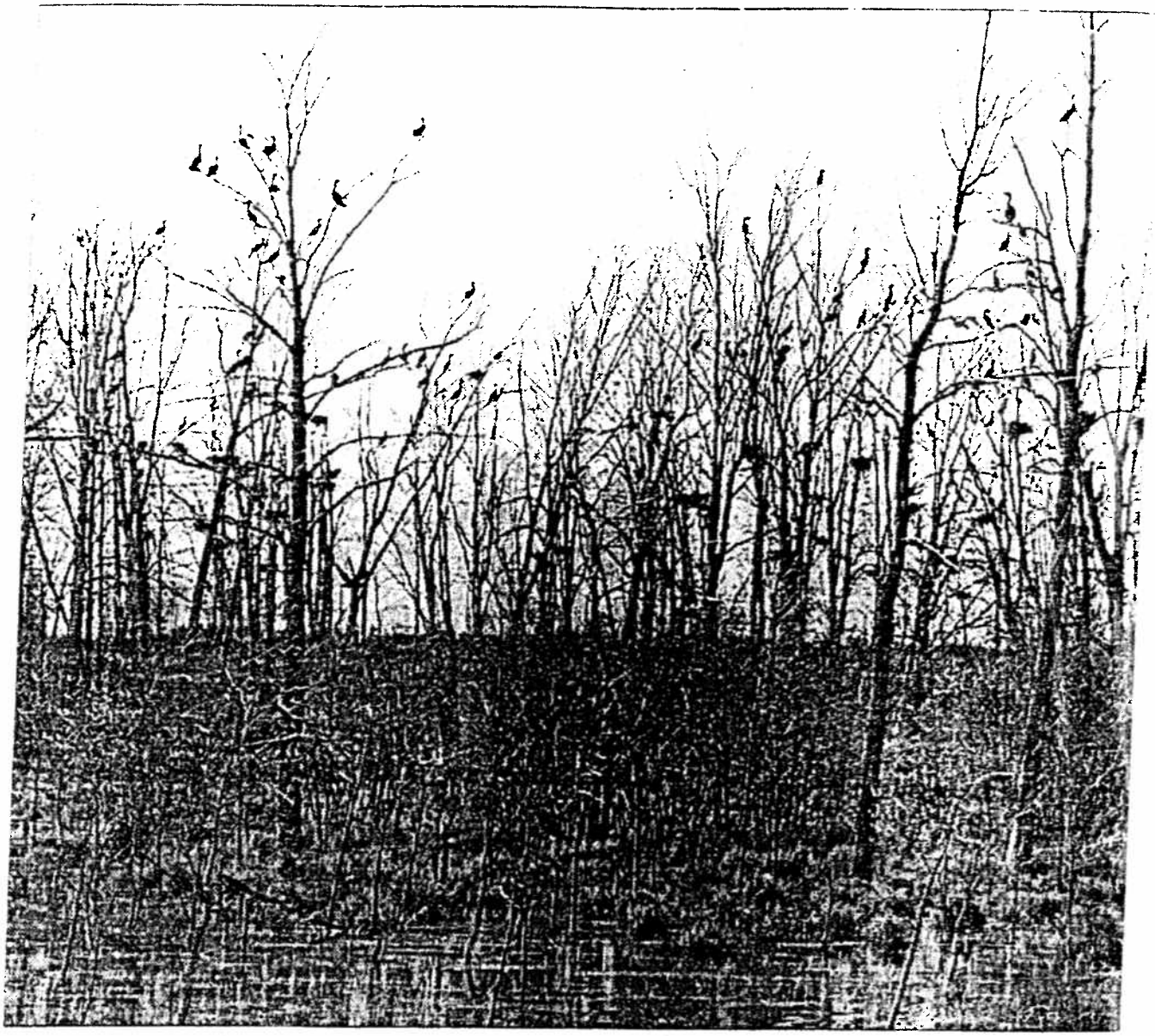
Mr. H. Dale Hall, Director
United States Fish and Wildlife Service
1849 C Street, NW Room 3258
Washington, DC 20240

Senator Michelle McManus
P.O. Box 30036
Lansing, MI 48909-7536

Senator Thad Cochran
U.S. Senate Appropriations Committee
113 Dirkson Senate Office Building
Washington, D.C. 20510-2402

Thanks for all your help. We are making effective inroads into getting our fishery back from the devastation that the cormorants are causing. We could further use anyone's help that can affect the Michigan DNR's Wildlife Division to get on board in the project.

Larry



CAUSE OF CONCERN

Around 100 double-crested cormorants roost in dead trees near the blue heron rookery in the Houghton Lake Flats Sunday evening. The birds have become a cause of concern among anglers and other residents of the Great Lakes region, who blame depleted fisheries on the great increase in the population of cormorants over the last three decades.

(Photo by Thomas Reznich)

Cormorants on Flats probably visitors

The Houghton Lake Flats are a great resource for those interested in viewing marshland wildlife, but recent sightings of larger-than-usual numbers of the double-breasted cormorant have caused concern among residents and visitors.

A large diving bird, the cormorant is a very effective fisher and is thought by many to be the reason for declines in fisheries around the Great Lakes region, where populations of the bird have experienced great increases over the last 30 years.

Department of Natural Resources Wildlife Biologist Jerry Weinrich, Roscommon, said concerns for local fisheries are probably not warranted, as the cormorants are still migrating and could be expected to move on soon.

He said concern for the blue heron rookery adjacent to the area where the cormorants have their fishing in different areas. The wading herons fish the shallows and the diving cormorants can fish in up to 50 feet of water.

Weinrich said he overflew the heron rookery last week and saw many of the birds on the nests, incubating eggs.

The issue of a booming cormorant population in the Great Lakes region was addressed recently by U.S. Rep. Dave Camp, R-Midland, who sent the House Appropriations Committee's Subcommittee on Agriculture a request for $450,000 to fund stud-

Environment & Climate News
February 2000
Contents

Cormorants culprits of contamination

A federally protected bird is proliferating, threatening fish populations and human health

by Dan Thomas

A private consulting firm hired by a group of concerned citizens has found potentially harmful levels of PCBs, DDE, and mercury on state-owned property, Little Galloo Island, in eastern Lake Ontario. The contamination is due to burgeoning populations of the double-crested cormorant, which has invaded the area in recent years.

Testing performed by Chopra-Lee Inc. of Grand Island, New York, a state-accredited environmental analytical laboratory, found PCB levels of nearly five parts per million in a guano/soil sample, a level exceeding state action levels for cleanup. Two mercury readings also exceeded state levels. The study was conducted during August 1999 and just released.

The concentration of toxic materials found in the soil and bird guano on Little Galloo Island appears to have bioaccumulated. Bioaccumulation occurs when chemically tainted fish are consumed in massive amounts by the gluttonous cormorant, then deposited in the form of excrement, eggshell remnants, and bird carcasses.

Mixing zones

A recent article in *The Wall Street Journal* called attention to the fact that bioaccumulative chemicals (BCCs), including mercury and PCBs, are still being dumped into areas called "mixing zones" in the Great Lakes and surrounding wetlands. BCCs from these mixing zones eventually permeate all waters of the Great Lakes, and as a result all species in the food chain are exposed.

Mixing zones and the dispersed contamination they cause lead to BCCs being collected by fish and bird species, which themselves become "accumulators." Unlike fish, the cormorant accumulates toxic chemicals from hundreds of square miles of the lake, brings these chemicals back, and deposits them in the form of guano on a few island acres.

"We are outraged that such a situation exists on state-owned property. It is intolerable that state land contains concentrated BCC which during spring thaw and seasonal rains can leach into local waters, thus exposing area residents," said the citizens who arranged to have the study conducted, residents of Henderson, New York.

The spread of the cormorant

The double-crested cormorant (DCC) was first reported in the Lake of the Woods area of Ontario, Canada as early as the late eighteenth century. Cormorant nestings were reported in Lake Superior in the 1920s. Breeding was reported on Lakes Erie and Ontario in the late 1930s. By the late 1940s and early 1950s, cormorant nesting pairs were in abundance in the eastern Lake Ontario region. In 1974, 22 pairs of cormorants were reported on Little Galloo Island.

From 1973 to 1991, their numbers increased more than 300-fold in certain areas of the Great Lakes. The dramatic increase in DCC populations was probably augmented by a rise in the numbers of smaller fish, such as rainbow smelt and alewife, along with increases in the stocking of game fish such as salmonoides and bass by the New York State Department of Environmental Conservation (NYSDEC) and the Ontario Ministry of the Environment. In 1996, there were a reported 8,410 pairs of cormorants on Little Galloo island.

Studies recently completed by the NYSDEC have concluded that double-crested cormorants consume significant numbers of smallmouth bass, greatly reducing the overall population. Current estimates of smallmouth bass consumption by cormorants exceed the number taken by anglers by 10- to 30-fold. The expanding cormorant populations have also displaced the black-crowned night heron from Little Galloo Island and destroyed woody vegetation on the island favored by other colonial species.

A health threat

Chopra-Lee Inc. was retained by a group of homeowners in the Henderson Bay area to determine if the population explosion of the double-crested cormorant over the last few decades may pose a health threat to the citizens of the area and/or the environment.

To date, the investigation has shown that birds roosting on Little Galloo Island, especially the double-crested cormorant, have deposited toxic compounds like mercury, PCBs, and DDE on the island. (See sidebar.) The toxic materials have bioaccumulated exponentially on Little Galloo, as compared to other islands in the area, due to the overpopulation of cormorants.

The surface water sampling has shown a potential correlation between Little Galloo Island and the downwind surface water quality. Total bacteria colony-forming units downwind of the island (1,367) were dramatically higher than the upwind sampling location (less than 33). Although no PCBs, DDE, or excessive levels of heavy metals were found downwind of Little Galloo Island, the PCBs and DDE found on the island are a potential leaching source of surface water contamination during heavy rains or spring snow melts.

The study raises concerns for the health of the inhabitants of neighboring Galloo and Stony Islands, where the potable drinking water is provided by Lake Ontario. Those water supplies may be adversely affected by surface runoff from Little Galloo Island. The surface waters of Henderson Bay and other mainland areas are potentially vulnerable to runoff from Little Galloo during periods of excessive rain and/or snowmelt.

The Chopra-Lee Inc. investigation and data from other assessments performed in the area strongly suggest that Little Galloo Island's overpopulation of the double-crested cormorant has had an adverse effect on the area's ecosystem. The release and accumulation of bird excrement and dead cormorant carcasses appear to be a direct threat to human health and the surrounding environment.

Dan Thomas is president of the Great Lakes Sports Fishing Council. He can be reached by e-mail at dan@great-lakes.org. *Reprinted with permission from the December 6, 1999 issue of the Great Lakes Basin Report.*

Return to February 2000 contents.

Dec 28 2005 By MDNR Wild life Div
Ray Rustam

Table 3. Double-Crested Cormorant Breeding Colony Surveys

Waterbody	Site	1997	2003	2004	2005
Lake Superior	Amygdaloid Island, Isle Royale National Park	82			No Survey
	Granite Island	100			No Survey
	Little Traverse Island	30			No Survey
	Net Island, Isle Royale National Park	460			No Survey
	North Rock, Isle Royale National Park	188			No Survey
	Paul Island Rocks, Isle Royale National Park	38			No Survey
	Steamboat Island, Isle Royale National Park	438			No Survey
	Tahquamenon Island	297			157
Lake Michigan	Bellows Island	452	675		No Survey
	Big Gull Island	2,114			3,684
	Davenport Creek Shoal	3			724
	East Grape Island	478			0
	Epoufette Island	608			0
	Fishermans Island	584			863
	Green Island, Mackinac	8			425
	Gull Island	1,887			2,332
	Hat Island	4,617			5,289
	Island southeast of Garden Island				44
	Ile aux Galets				713
	Ludington Pump Storage Break Water				No Survey
	Little Gull Island	1,528			1,703
	Morazan	29	300		340
	Naubinway Island	690			1,131
	Pismire Island	383			838
	Rocky Island	96			0
	Snake Island, Bay de Noc	1,467			1,426
	Timms Island	753			0
	West Grape Island	3,031			0
	Whiskey Island	560			0
St. Mary's River	East Pipe Twin Island	27			0
	Gem Island	32			150
	Little Cass Island	19			27
	Propellor Island	256			0
	Rock Island	261			0
	West Pipe Twin Island	4			0
Lake Huron	Bird Island	690			No Survey
	Crow Island	221			106
	Goose Island	1,928			713
	Grassy Island	8			No Survey
	Gull Island	1,309			No Survey
	Little Charity Island	438			1,604
	Little Saddlebag Island	403			571
	Saginaw CDF				197
	Scarecrow Island	1,777			1,583
	St. Martin's Shoal	1,767			1,374
Detroit River	Peche Island range light				34
Lake Erie	Detroit Edison	397		0	0
Grand Total		30,458	975	0	26,028

1

492

910
Killed

Mich DNR
study shows
"0"

Table 1. Calendar Year 2004 Double-Crested Cormorant Management Activities

State	Action Agency	Type of Action(s)	Resource Justification	Location(s)
New York	APHIS/Wildlife Services	105 birds taken; 592 eggs taken; 71 nests oiled; 449 nests destroyed	Protect sportfish, reduce interspecific competition and reduce property damage (vegetation)	Oneida Lake, St. Lawrence River (Central NY watershed)
	New York Department of Environmental Conservation	377 birds killed; 11,379 nests oiled; 2,369 nests destroyed	Protect habitat, reduce competition w/other birds, reduce sportfish depredation	Eastern Lake Ontario, Lake Erie, Niagara River
Vermont	APHIS/Wildlife Services and VFWD	208 birds taken; 1,458 nests oiled	Reduce damage to vegetation (habitat) and promote wildlife diversity	Young Island, Lake Champlain
Michigan	APHIS/Wildlife Services	1,202 birds killed; 3,114 nests oiled	Reduce DCCO foraging on yellow perch	Les Cheneaux islands and Drummond Island, Lake Huron
	Bay Mills Indian Community (CORA)	222 birds shot	Reduce depredation on walleye at stocking sites	Eastern Lake Superior and northern Lake Huron
	Sault Ste. Marie Tribe (CORA)	Had plans to act under PRDO but did not do so in 2004	Reduce depredation on walleye and other fisheries	Northern Lake Huron
Minnesota	APHIS/Minnesota Department of Natural Resources	Nonlethal activities only	Reduce depredation on stocked salmon smolts and prevent damage to trees and vegetation	Knife Island/mouth of the Knife River, Lake Superior
	Leech Lake Band of Ojibwe	Habitat reduction	Protect common terns and reduce walleye predation	Little Pelican Island, Leech Lake

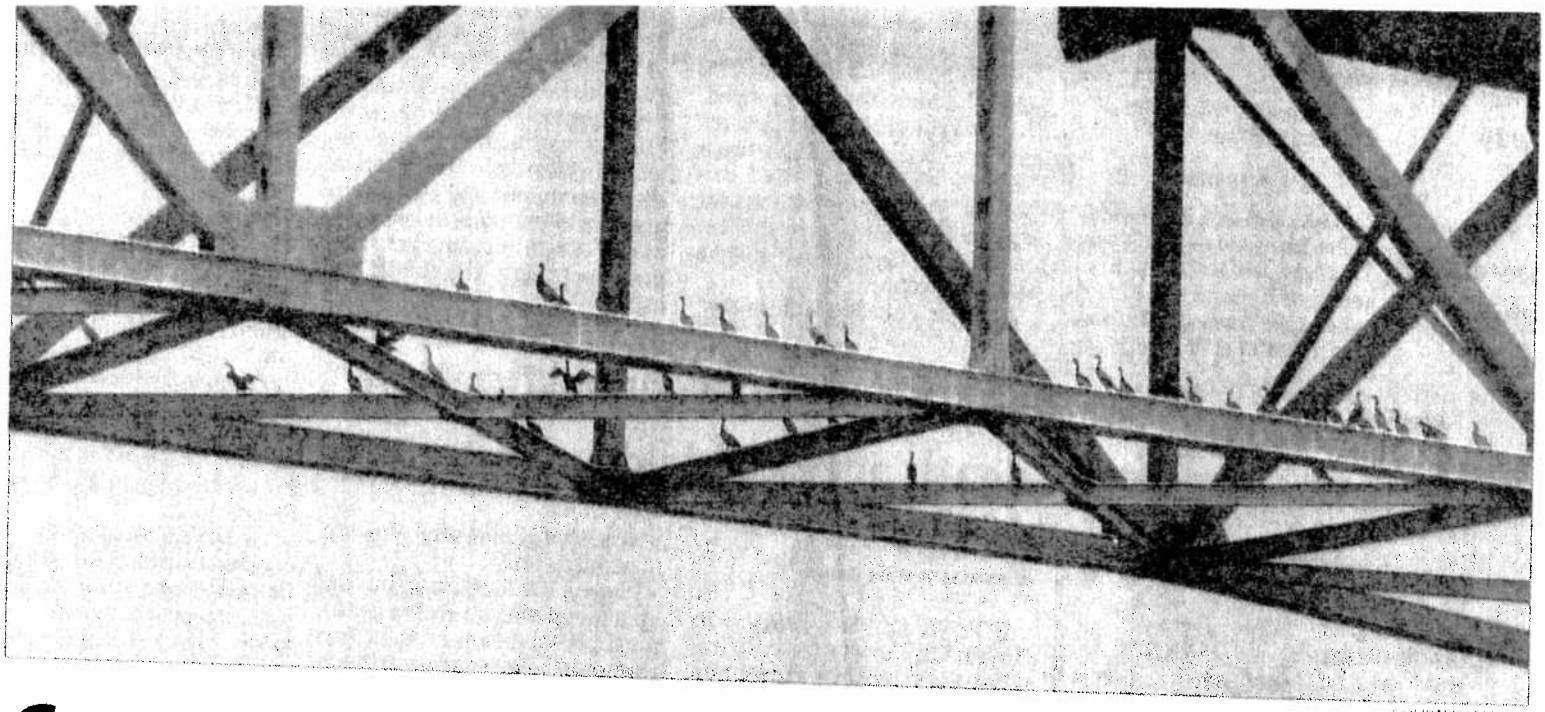
Abbreviations:
APHIS = United States Department of Agriculture Animal and Plant Health Inspection Service
CORA = Chippewa Ottawa Resource Authority
DCCO = Double-Crested Cormorant
PRDO = Public Resource Depredation Order
VFWD = Vermont Fish and Wildlife Department

Taken From The Audubon Spring Bird Count in Mason County 1994-2002

The following number of Double-Breasted Cormorants were sighted with an average of 30 hrs. per count for the whole county.

1994	–	71
1995	–	4
1996	–	9
1997	–	57
1998	–	22
1999	–	212
2000	–	1
2001	–	177
2002	–	951

This averages out to 167 Cormorants sighted per year.
Yet, according to the Cormorant Island surveys in Michigan in the years 1997 and 2005, "They" found more.



COURTESY PHOTO

Double-crested cormorants perch on the Mackinac Bridge during summer. Bridge authorities say bird droppings corrode the steel of the bridge.

Cormorants, Mackinac Bridge don't mix

Officials say droppings are corroding the span

BY FRED GRAY
NEWS-REVIEW STAFF WRITER

MACKINAW CITY — Pigeon and sea gull droppings have been eating away at the paint on the Mackinac Bridge for years and now double-crested cormorant poo can be added to the noxious mix, says the Mackinac Bridge Authority's chief engineer.

"We don't want them there," said Kim Nowack, who is looking for new ways to shoo the birds away. "The cormorants are the latest threat to the bridge. The bird droppings corrode the steel, and make maintenance harder by soaking up moisture and putting it against the steel."

She said the annual inspection report said the droppings were a detriment to the coating system but had not risen to the "major problem" category.

Nowack said the authority had put screens on the box beams under the bridge where the pigeons like to nest, mainly toward the Mackinaw City end of the bridge. But the cormorants, which migrate to Michigan from Mississippi and Arkansas in the spring and return in late fall, are much larger and more voracious birds than pigeons and gulls.

Pete Butchko, state director of the U.S. Department of Agriculture's Wildlife Services, said that if he is asked he will make a site visit to the bridge and make a recommendation of things the bridge authorities might try to rid themselves of the menace.

"The bridge is symbolic with the state and anything that happens to

SEE BIRDS, PAGE A8

FRED GRAY/NEWS REVIEW

Kim Nowack, the Mackinac Bridge Authority's chief engineer, says droppings from double-crested cormorants, pigeons and sea gulls have been eating away at the paint on the bridge for years.

CLARK TOWNSHIP
P.O. Box 367
Cedarville, MI 49719

Phone 906-484-2672
TDD 800-649-3777
"mailto:supervisor@cedarville.net" }

Fax 906-484-3199
E-mail: { HYPERLINK

December 6, 2004

Senator Debbie Stabenow
476 Russell Office Building
Washington D.C. 20510

Dear Madame:

I write this letter on behalf of the Clark Township Board of Trustees and the citizens of Cedarville and Hessel, Michigan. At a recent board meeting, we made a unanimous decision to write a letter expressing our appreciation for your part in helping to secure USDA funds to address the cormorant problem that has been plaguing our fisheries.

Clark Township is located in Mackinac County – a part of the 36-island archipelago known as the Les Cheneaux Islands – where tourism is the #1 industry. While we are striving to diversify our economy, for over a hundred years Clark Township has been a resort community comprised primarily of retail and service businesses dependent on tourism related to our historically plentiful fisheries.

Due in large part to the impacts of the invasive cormorant population, our fishery is in serious decline. Also, the cormorants have been overtaking our pristine shoreline and islands, their excrement causing them to become defoliated, resulting in loss of nesting areas and important habitat for migratory birds and destruction of private property causing loss of property values.

The traditional economy of Clark Township is breaking down. Our way of life and our very livelihoods are threatened. We ask that you stick by the people of Clark Township by continuing to support funding for the USDA study and depredation of cormorants in the Les Cheneaux Islands.

Sincerely,

Linda Hudson, Supervisor

Michigan United Conservation Clubs

2101 Wood St. • P.O. Box 30235 • Lansing, Michigan 48909 • 517/371-1041 • FAX: 517/371-1505 • www.mucc.org

MUCC

Uniting Citizens to Conserve Michigan's Natural Resources and Protect OUR Outdoor Heritage

Home of

Out-Doors™ Multimedia

Outdoorama™

Tracks™ Magazine for Kids

Michigan Out-Doors™ Camp for Kids

April 2004

The Honorable Debbie Stabenow
United State Senator
702 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Stabenow,

Michigan United Conservation Clubs is an alliance of over 500 conservation clubs and organizations representing over 80,000 individual and their families in Michigan. I am writing to ask for your support for increased funding for cormorant monitoring and control by the Wildlife Services program of the U.S. Department of Agriculture.

We are very concerned with the tremendous explosion of double-crested cormorants in the state of Michigan and the impacts they are having on sports fishing in many areas. The waters surrounding the Les Cheneaux Islands of Northern Lake Huron have been particularly hard hit.

In an effort to address the growing concerns over the negative impacts cormorants are having on the Great Lakes region, the U.S. Fish and Wildlife Service conducted an extensive Environmental impact Statement process to examine all the evidence, viewpoints and alternatives. This process culminated in November 2003, when the U.S. Fish and Wildlife Service adopted rules that expanded the management options for cormorants in these situations. Of particular significance to Michigan is the depredation order that gives new authority to recognize tribes, the state wildlife agencies and USDA-Wildlife Services to remove cormorants that threaten sport fish, vegetation and other nesting birds. We are very pleased that the Wildlife Services is undertaking a pilot project in 2004 with funding provided by Congress. We recognize that balancing cormorants to the biological and social environment will take many years.

This is to ask your support for an initiative promoted by the Mississippi Farm Bureau to fund Wildlife Services to fully implement their expanded authority to manage cormorants.

The Wildlife Service expects that cormorant control in Michigan and 18 other states will take $4.2 million. Wildlife Services has a proven track record in cormorant management and research and in protecting aquaculture from fish-eating birds. We believe that their efforts in cooperation with other agencies will restore the balance between cormorants and fish that our membership strongly supports.

Yours in Conservation,

Sam Washington
Executive Director

March 4, 2005

The Honorable Debbie Stabenow
United States Senator
702 Hart Senate Office Building
Washington DC 20510

ATTN: Brandon Fewins

Dear Senator Stabenow:

The Michigan Brown Trout Festival Committee and the Alpena community are very concerned with the tremendous explosion of double-crested cormorants in Thunder Bay and the significant, negative impacts that the cormorants are having on the Thunder Bay fishery, especially the Brown Trout fishery. A vital Thunder Bay fishery is important to the Alpena community as well as to tourism in northeast Michigan. The Michigan Brown Trout Festival voted the "Best Small Festival in Michigan" is entering its 31st year of operation and is the longest running blue water fishing festival on the Great Lakes. Each year over 1,300 participants ply the waters of Thunder Bay and Lake Huron during this 10-day event. Last year 105 boats with 315 women participated in our Jack Daniels, Herb Lang Ladies Classic and 87 boats with 348 fishing participants were involved in the Pepsi Super Tournament. Without the outstanding fishery that the MDNR, U.S. Fish and Wildlife, and local interests groups have worked diligently to establish and preserve within Thunder Bay, the Michigan Brown Trout Festival would surely be a festival of the past along with the tourism and the economy it generates within the Alpena community.

The U.S. Fish & Wildlife Service has adopted new rules that now allow for more active cormorant management to the states, Indian tribes, and the U.S. Department of Agriculture – Wildlife Services. We believe that a cormorant control program in Thunder Bay would have many positive benefits. However, funding to undertake such a cormorant control program is lacking. We have discussed the need for the program with Mr. Peter Butchko, State Director, U.S. Department of Agriculture – Wildlife Services; and Mr. Jim Johnson, Michigan Department of Natural Resources Fisheries Division. They are both very supportive and would like to see a cormorant control program moved forward in Thunder Bay as soon as possible.

235 W. Chisholm Street
Alpena, Michigan 49707

1-800-4-ALPENA
517-354-4181
www.oweb.com/upnorth/btrout

ROGERS CITY
The Nautical City

Rogers City Chamber of Commerce
292 S. Bradley Hwy., PO Box 55
Rogers City, MI 49779-0055
Phone: (800) 622-4148 / (989) 734-2535
Email: rcchamber@lhi.net / Website: www.rogerscity.com

February 25, 2005

To: Larry Meier
2704 EW Branch Rd.
Prudenville, MI 48651

From: William Hanchett, Executive Director
Rogers City Chamber of Commerce
PO Box 55
Rogers City, MI 49779

Subject: Copy of letter sent on Lake Huron Cormorant Problem

Our town depends largely on summer tourism, much of which is generated by fishing activity since our city is known for it's salmon fishing. Rogers City is even the official salmon capital of Michigan.

Cormorants are having a serious effect on fishing since they are eating so many salmon fingerlings and small 'feed' fish. Perch fishing has been essentially wiped out on the lake. Each cormorant can eat 1 ½ times it's weight in fish each day. They also reproduce much faster than fish and live almost three times longer.

We're seeing the results in our fishing catch. Fishermen are catching less fish and those they catch are typically one quarter the size they used to be. Our tournaments used to bring in many 24 pound fish and now there are more six pound fish. Tournament winners used to be thirty plus pounds and now winners are twenty to twenty-two pounds.

Fewer people are coming fishing and joining the tournaments because of the smaller catches. One tournament has even totally cancelled coming to our area. The state should use all the resources available to attack the cormorant problem wherever it can while we still have a fish problem to worry about.

Please help! Support programs to eliminate cormorants from the Great Lakes. They have already overrun Europe and severely damaged their fishing industry. Don't let it happen here!

Houghton Lake
Michigan's Largest Inland Lake

1625 W. Houghton Lake Dr.
Houghton Lake, MI 48629

Congressman Dave Camp
139 Ashman
PO Box 423
Midland, MI 48630

Congressman Camp

I want to thank you for your concern with the rising population of the cormorants in the Houghton Lake area. The most recent figures show that there are as many as six hundred of these fish eating birds nesting in Roscommon County. This is of great concern to the people of Houghton Lake. These birds eat a pound and half of fish each day. The Houghton Lake area depends on the great fishing the lake provides.

Again I want to thank you for your support with the cormorant issue and ask you to continue working on this serious issue. If you require more information please call me at 989-366-5644.

Robert E Spaulding
Executive Director
Houghton Lake Chamber of Commerce
989-366-5644

(989) 366-5644 1-800-248-5253 Fax: (989) 366-9472
Web Site: www.houghtonlakechamber.org Email: hlcc@iserv.net

CHEBOYGAN AREA CHAMBER OF COMMERCE

P.O. Box 69 • 124 N. Main St. • Cheboygan, Mich. 49721 • 231-627-7183

February 14, 2005

U.S. Senator Debbie Stabenow
702 Hart Senate Office Building
Washington, DC 20510

Senator Stabenow:

On behalf of our more than 400 Chamber members, several sportsmen groups across northern Michigan and fishing enthusiasts throughout the Great Lakes, I am writing this letter to encourage your help in addressing the cormorant issue. These birds continue to cause several problems.

Many different areas of our economy are being affected, including fishing, tourism and lighthouses. The cormorants continue to eat the food that sport fish rely on. The birds are also hindering efforts of those groups trying to restore lighthouses in the straits area.

We are asking for your continuing support in the effort to fund programs that focus attention on tackling this problem. Unfortunately, the cormorants seem to migrating towards the Cheboygan area after eating up most of their food in the other parts of northern Lake Huron.

Sincerely,

Michael Grisdale
Executive Director

Huron Shores Chamber of Commerce
P.O. Box 581 Harrisville, MI 48740 • (989) 724-5107 • 800-432-2823

March 1, 2005

U.S. Senator Debbie Stabenow
C/O Amy Ferstenau
702 Hart Senate Office Building
Washington, D.C. 20510

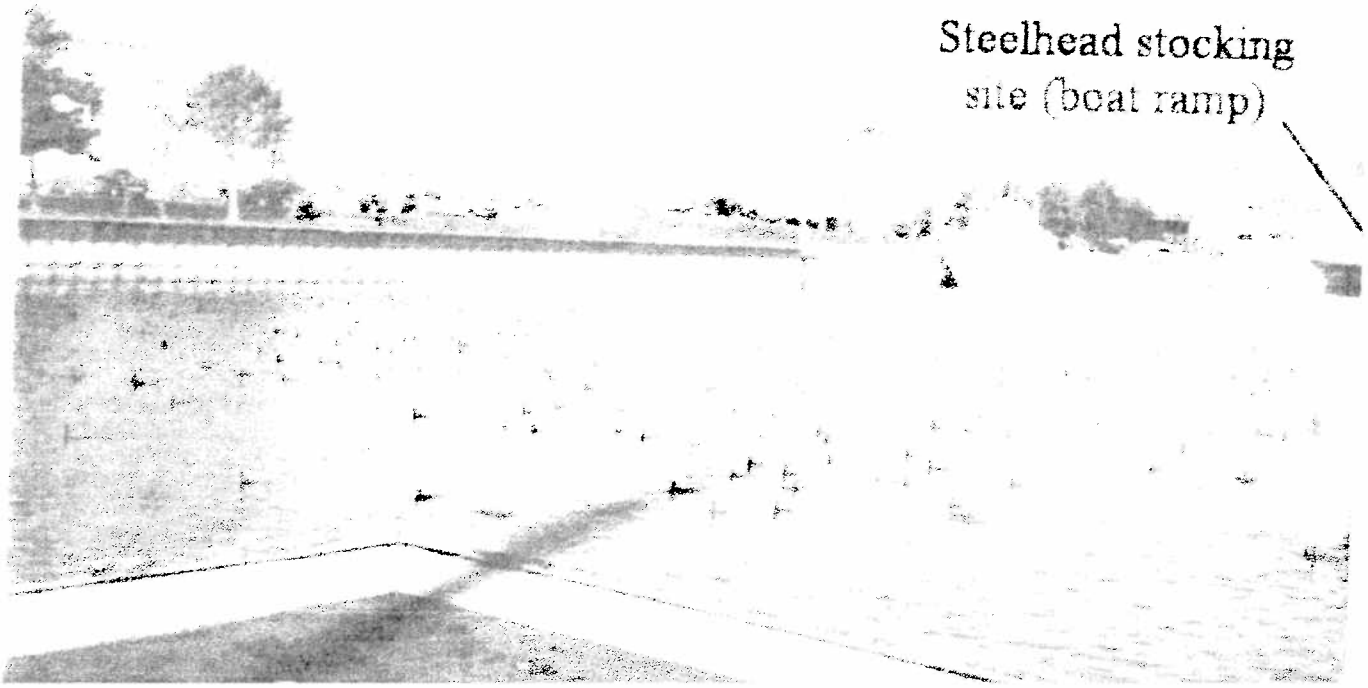
Dear Senator Stabenow:

This letter is on behalf the Huron Shores Chamber of Commerce and is being sent to you to plead for your assistance and support to help us combat the invasion of the fish eating bird, the Cormorant, which is devastating the fish population in Lake Huron.
Our membership consists of approximately 100 business members in Alcona County; most of them dependant on tourists and vacationers, including fisherman, to support their businesses and our economy in general.
The Cormorant's exploding population and the results of its horrendous feeding habits on feeder fish of larger species, the fry of larger species and the near annihilation of the perch population, is impacting the economy in our area. Because the fish population is declining, we are loosing recognition and support of well known fishing organizations, such as The Michigan Steelheaders Association.
We all know that if this trend is allowed to continue, our community and others along Lake Huron could be devastated by its effects.
I understand that there have been Federal funds allocated to assist with this problem in the Cedarville and Hessel areas of Michigan. Please provide your assistance to help us secure the funding to combat the same problem in our area.

Respectfully,

Larry K. Lyle
President
Huron Shores Chamber of Commerce

Day after stocking brown trout
on Alpena breakwall, June 14, 2002



Steelhead stocking
site (boat ramp)